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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/528,431	12/15/2005	Thomas Mueller	056226.56006US	4149

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CROWELL & MORING LLP  
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WASHINGTON, DC 20044-4300

EXAMINER
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LEE, BENNY T

ART UNIT	PAPER NUMBER
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2817

SHORTENED STATUTORY PERIOD OF RESPONSE	MAIL DATE	DELIVERY MODE
3 MONTHS	04/11/2007	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

**Office Action Summary**

Application No.

10/528,431

Applicant(s)

MUELLER, THOMAS

Examiner

Benny Lee

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 18 March 2005.
- 2a) ☐ This action is **FINAL**.                      2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 9-19 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 9-19 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 18 March 2005 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☒ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |   |   |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)                                 | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date: _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                        | 5) <input type="checkbox"/> Notice of Informal Patent Application                       |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)<br>Paper No(s)/Mail Date: _____ | 6) <input type="checkbox"/> Other: _____  |

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The specification is replete with grammatical errors too numerous to mention specifically. The specification should be revised carefully. Examples of such errors are: Page 1, paragraph [0003], 4<sup>th</sup> line therein, “which” needs rewording; 7<sup>th</sup> line therein, “electrically conductively connected” needs rephrasing. Page 1, paragraph [0004], 5<sup>th</sup> line therein, “owing” should be rewritten as --due--. Page 4, paragraph [0020], 9<sup>th</sup> line therein, “small” should be rewritten as --minimized--. Page 5, paragraph [0026], 4<sup>th</sup> line therein, “TE1o” should be --TE10--

The disclosure is objected to because of the following informalities: Page 4, in the heading, note that --**OF THE PREFERRED EMBODIMENTS**-- should be inserted after “**DETAIL DESCRIPTION**” as per PTO guidelines. Page 5, paragraph [0023], first line therein, note that it is unclear with respect to which drawing figure is “the illustration shown” intended to refer; second line therein, should the reference to “Figure 2” correctly reference --Figure 4--? Page 5, paragraph [0024], 3<sup>rd</sup> & 4<sup>th</sup> lines therein, note that reference to “substrate S as shown in Figure 3” is vague in meaning since no “substrate S” appears in “Figure 3”. Clarification is needed. Page 7, paragraph [0036], 4<sup>th</sup> line therein, note that reference to “the substrate 6” (i.e. with respect to Figure 9) is vague in meaning and needs clarification. Note that with respect to the description of Figures 5-8, note that the majority of reference labels appearing in these drawing figures need to be correspondingly described with respect to the specification description of that drawing figure. Similarly, note that reference labels (LS, S, RM) need a corresponding description relative to the Figure 9 description. Appropriate correction is required.

The drawings are objected to because of the following: In Fig. 1, note that the drawing figure needs to be designated as --PRIOR ART--; In Fig. 3, note that a reference label --S-- needs

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to be provided such as to be commensurate with the description at paragraph [0024]; In Fig. 9, note that reference label "ST" as used herein does not appear commensurate with the earlier use of reference label "ST" in Figure 4 to designate a different structure. Clarification is needed..

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claims 9-19 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

In claim 9, note that it is unclear how the recitation of "one side wall" (i.e. line 7) relates to the recitation of "one side wall" (i.e. line 9). That is to say, are they the same "side wall", different side walls, etc? Clarification is needed.

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In claims 11, 12, 18, 19, note that it is unclear how "a side wall" as recited herein relates to the earlier recitations of "a side wall". Clarification is needed.

In claim 13, note that reference to "the electromagnetic wave" is not definite since no such feature has been recited earlier. Clarification is needed. Moreover, note that "the intermediate spaces" lacks strict antecedent basis.

In claims 15, 16, note that it is unclear how the recitation of "a waveguide opening" relates to the "cutout" as recited in claim 9, from which each claim depends (i.e. same as, different from, etc). Clarification is needed..

In claims 18, 19, note that it is unclear how "a step or steps" relates to "a step or steps" as recited in claim 9, from which this claim ultimately depends (i.e. same as, different from, etc). Clarification is needed.

The following claims have been found to be objectionable for reasons set forth below:

In claim 9, line 6, note that --thereof-- should follow "surface" for an appropriate characterization.

In claim 9, line 10 & claim 11, line 2, note that "formed" should be rewritten as --disposed-- for an appropriate characterization.

Claims 9-19 would be allowable if rewritten or amended to overcome the rejection(s) under 35 U.S.C. 112, 2nd paragraph, set forth in this Office action.

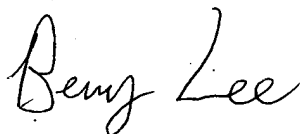
Regarding the Information Disclosure Statement (IDS) filed 18 March 2005, a consideration of the IDS has been deferred by the examiner since the foreign patent documents cited in the IDS do not appear to be in the file record. Since the contents of the IDS were a part of an International Search Report, and this application is a National Stage filing, the references

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cited in the IDS would normally have been transmitted to the National Stage Office by the International Bureau, and applicant is not under any obligation to provide the purportedly missing foreign patent documents to comply with the IDS filing requirements. However, as a courtesy to the examiner, it is requested that applicant voluntarily submit copies of the foreign patent documents in applicant's response to this Office action. This would greatly expedite consideration of applicant's IDS.

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Sedivec and Schmidt et al pertain to respective transitions between a waveguide and a strip line configuration using a corresponding impedance transforming step structure.

Any inquiry concerning this communication should be directed to Benny Lee at telephone number 571 272 1764.



B. Lee

BENNY T. LEE  
PRIMARY EXAMINER  
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